
पोर्क सॉसेज, ताजा — विशिष्टि
(दूसरा पुनरीक्षण)

**Pork Sausages,
Fresh — Specification**
(*Second Revision*)

ICS 67.120.10

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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Slaughter and Meat Industry Sectional Committee had been approved by the Food and Agriculture Division Council.

The formulation of this standard had been undertaken at the request of the Ministry of Health, Government of India. In the preparation of fresh pork sausages, the pork which constitutes the main ingredient is blended with other ingredients, such as pork fat, seasonings, fillers and sweetening agent. The blended material is then filled in animal casings.

This standard was first published in 1965 and subsequently revised in 1979. In the first revision, requirements for a new type of sausage (cocktail sausages) were included and test methods updated. This revision has been brought out to bring the standard in the latest style format of the Indian Standards. It also incorporates two amendments issued to the first revision of the standard.

This standard contains a clause regarding packing of pork sausages, fresh, which calls for an agreement between the purchaser and the packer at the time of placing orders.

In the formulation of this standard, due consideration has been given to the provisions of the *Food Safety and Standards Act*, 2006 and the Rules framed thereunder and the *Legal Metrology (Packaged Commodities) Rules*, 2011. However, this standard is subject to the restrictions imposed under these, wherever applicable.

The composition of the Committee responsible for the formulation of this standard is given in Annex B

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

PORK SAUSAGES, FRESH — SPECIFICATION

(*Second Revision*)

1 SCOPE

This standard prescribes the requirements, methods of sampling and test for pork sausages, fresh.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

<i>IS No</i>	<i>Title</i>
874 : 1992	Dextrose monohydrate — Specification (<i>third revision</i>)
1151 : 2021	Refined sugar — Specification (<i>third revision</i>)
1723 : 1973	Specification for pork (<i>first revision</i>)
1981 : 2018	Animal casings — Grades and specification (<i>second revision</i>)
1982 : 2015	Ante-mortem and post-mortem inspection of meat animals — Code of practice (<i>second revision</i>)
2491 : 2013	Food hygiene — General principles — Code of practice (<i>third revision</i>)
3060 : 1979	Specification for pork sausages, canned (<i>first revision</i>)
4251 : 1967	Quality tolerances for water for processed food industry
4752 : 1994	Sodium metabisulphite, food grade — Specification (<i>first revision</i>)
4905 : 2015/ ISO 24153 : 2009	Random sampling and randomization procedures (<i>first revision</i>)
7224 : 2006	Iodized salt, vacuum evaporated iodized salt and refined iodized salt — Specification (<i>second revision</i>)

3 TERMINOLOGY

For the purpose of this standard, the following definitions shall apply.

3.1 Meat — The uncured, sound and wholesome flesh of the pig, namely, pork, used as food (*see* IS 1723).

3.2 Offal — This includes brain, fries (liver), gut, paunches, udders, sweetbreads (thymus, pancreas), tripe, spleen, lungs, salivary glands, lymphatic glands, testicles, uterus, ovaries, skin other than pork rind, cartilage and bony tissues.

3 TYPES

Pork sausages, fresh, shall be of three types, namely:

- a) *Type 1* — Pork sausages, fresh, chilled;
- b) *Type 2* — Pork sausages, fresh, frozen; and
- c) *Type 3* — Cocktail sausages, chilled.

4 REQUIREMENTS

4.1 Hygienic Requirements

The material shall be prepared and handled under strict hygienic conditions by persons free from contagious and infectious diseases and only in premises maintained in a thoroughly clean and hygienic condition and having adequate and safe water supply (*see* IS 2491) and duly approved and licensed by the public health authorities concerned. All workers shall use clean, white, washed clothings. Necessary precautions shall be taken to prevent incidental contamination of the product from soiled equipment or from personnel suffering from injuries.

4.1.1 All equipment coming in contact with raw materials or products in the course of manufacture shall be kept clean. An ample supply of steam and water, hose, brushes and other equipment necessary for proper cleaning of machinery and equipment shall be available. The equipment may be sterilized by immersion in or swabbing with hypochlorite or other suitable chlorine solution.

4.1.2 Quality of water used for processing shall conform to IS 4251.

4.2 Ingredient Requirements

4.2.1 Quality of Meat — All meat used shall be obtained from healthy animal slaughtered in licensed premises and subjected to ante-mortem and post-mortem

inspection as prescribed in IS 1982. The pork shall be moderately firm (not oily or soft), of bright colour. Fine texture (not dark or coarse), and free from foreign odour or flavour, discolorations and deterioration. Frozen pork may also be used provided it is properly thawed and is sound and fit for human consumption before being used. Trimmings shall be free from gristle, tender tissues and excessive connective tissues. Trimmings which are bruised, or which are from parts of the head other than the masseter muscles or from seedy parts of bellies, shall not be used. Boar meat, feet, and offal shall not be used in the preparation of the product. Processed rinds may be used subject to a maximum of 2 percent by mass of the meat.

4.2.2 Filler — Only cereal rusk, cracker meal (broken biscuits), potato flour or other wholesome edible material of farinaceous origin shall be used as filler.

4.2.3 Animal Casing — Hog, sheep or goat casings used shall conform to the quality laid down in IS 1981. The calibre of the casings used for manufacture of cocktail sausages shall not exceed 18 mm.

4.2.4 Salt — Salt used in the preparation of pork sausages, fresh, shall conform to IS 7224.

4.2.5 Spices — All spices used shall be clean, sound and strictly wholesome and in every way fit for human consumption.

4.2.6 Phosphates — Phosphatic binders may be used in the preparation of pork sausages, fresh.

4.2.7 Fat — Only pure, wholesome and edible back or flayer pork fat shall be used.

4.2.8 Sweetening Agents — Only refined cane sugar (*see* IS 1151) or dextrose (*see* IS 874) shall be used.

4.2.9 Preservative — No preservatives other than sodium metabisulphite shall be used (*see* IS 4752).

4.3 Requirements for the Finished Product

4.3.1 Flavour and Appearance — Pork sausages, fresh, shall be palatable, and shall have pleasant flavors and attractive appearance. No foreign or any other objectionable odour shall be present.

4.3.2 Texture — Pork sausages, fresh, shall be of a good uniform texture characteristic of the product.

4.3.3 Freedom from Defects — Pieces of hair, bristle, skin, and particles of bone shall not be present in the product. The products shall be free from dirt and from insect and rodent contamination. Poisonous or deleterious substances shall not be present.

4.3.4 Added Colour — No artificial colouring matter shall be used.

4.3.5 Composition Requirements

4.3.5.1 The material shall contain not less than 80 percent of meat including fat provided that the total fat content does not exceed 32 percent of the total meat content when tested according to the method prescribed in Annex C of IS 3060.

4.3.5.2 The material shall not contain more than 5 percent of added water. Salt, sugar and seasoning together not exceeding 4 percent may be added.

4.3.5.3 Phosphates when used shall not exceed 0.5 percent by mass.

4.3.5.4 Sulphur dioxide (SO₂) content shall not exceed 250 ppm.

5 SAUSAGES, FRESH, CHILLED (TYPE 1)

Fresh sausages after being filled shall be brought to a temperature of about 1 °C within 24 h. The chilled material should be consumed within one week when stored at a temperature not exceeding 20 °C.

6 SAUSAGES, FRESH, FROZEN (TYPE 2)

6.1 Fresh sausages, after being filled shall be chilled before freezing and the freezing completed at –12 °C or lower within 3 days.

6.2 Sausages, fresh, frozen, shall be stored at –10 °C or lower.

7 SAUSAGES COCKTAIL (TYPE 3)

The cocktail sausages after being filled shall be brought to a temperature of about 1 °C within 24 h. The chilled material should be consumed within one week when stored at a temperature not exceeding 2 °C.

8 PACKING AND MARKING

8.1 Packing

Unless agreed otherwise between the purchaser and the packer, pork sausages, fresh, shall be packed in polyethylene bags, heat sealed, or gun taped, or in bags made of other suitable flexible packaging material or wrapped in butter paper and then in kraft paper. The unit of packing shall be as agreed to between the purchaser and the packer.

8.2 Marking

Each package shall be marked with the following particulars:

- a) Name and type of the material with brand name, if any;
- b) Name and address of the manufacturer;
- c) Net quantity of the contents;
- d) Batch number or code number;

- e) The words 'Best before' (month and year to be indicated); and
- f) Any other information required under the *Legal Metrology (Packaged Commodities) Rules, 2011* and the *Food Safety and Standards (Packaging and Labelling) Regulations, 2011*.

8.3 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules

and Regulations framed thereunder, and the products may be marked with the Standard Mark.

9 SAMPLING

The method of drawing representative samples of the material and the criteria for conformity shall be as prescribed in Annex A.

10 TESTS

Tests shall be carried out as prescribed in relevant Annexes of IS 3060.

ANNEX A

(Clause 9)

SAMPLING OF PORK SAUSAGES, FRESH

A-1 GENERAL REQUIREMENTS OF SAMPLING

A-1.1 Sampling shall be done by a person agreed to between the purchaser and the packer and in the presence of the purchaser, (or his representative) and the packer (or his representative).

A-1.2 Samples shall be stored in such a manner that the temperature of the material does not vary unduly from the normal storage temperature (*see* 5, 7 and 8).

A-2 SCALE OF SAMPLING**A-2.1 Lot**

In any consignment all the packets containing pork sausages of the same size and from the same batch of manufacture shall be grouped together to constitute a lot.

A-2.1.1 Samples shall be tested from each lot for ascertaining conformity of the material to the requirements of this specification.

A-2.2 The number of packets to be selected from the lot for testing the physical and chemical requirements shall depend upon the size of the lot and shall be in accordance with col 1 and 2 of Table 1. A sub-sample as given in col 4 shall be taken at random from the sample selected as in col 2.

A-2.3 The packets to be selected from the lot (**A-2.2**) shall be chosen at random from the lot and for this purpose a random number table shall be used

(*see* IS 4905) In case such tables are not available, the following procedure may be adopted:

Starting from any packer, count them as 1,2, 3 up to r and so on in one order. Every r th packer thus counted shall be chosen, r being the integral part of N/n , where N is the total number of packets in the lot and n the number of packets to be selected (Table 1).

A-3 NUMBER OF TESTS

A-3.1 Tests for flavour and appearance, texture, freedom from defects and colour (**4.3.1** to **4.3.4**) shall be carried out, individually on each of packets selected as in col 2 of Table 1 (*see* **A-2.2**).

A-3.2 Tests for composition requirements (*see* **4.3.5**) shall be carried out individually on each of the packet selected as in col 4 of Table 1.

A-4 CRITERION FOR CONFORMITY

A-4.1 The lot shall be considered satisfactory in respect of the requirements tested in **A-3.1** if the number of defective packets found in **A-3.1** does not exceed the corresponding number given in col 3 of Table 1.

A-4.2 The lot shall be considered satisfactory in respect of the requirements tested in **A-3.2** if each sample satisfies all these requirements.

A-4.3 The lot shall be declared to be in conformity with all the requirements of this specification, if it has been found satisfactory in **A-4.1** and **A-4.2**.

Table 1 Number of Packets to be Selected for Sampling

(Clauses A-2.2, A-2.3, A-3.1 and A-4.1)

Sl No.	No. of Packets in the Lot	No. of Packets to Be Selected	Permissible No. of Defectives	Size of Sub- Sample
i)	(1)	(2)	(3)	(4)
ii)	Up to 150	5	0	2
iii)	151 - 300	10	1	3
iv)	301 -500	13	1	4
v)	501 -1000	20	2	5
vi)	1001- 3000	32	3	6
vii)	3001 and above	50	5	7

ANNEX B*(Foreword)***COMMITTEE COMPOSITION**

Slaughter House and Meat Industry Sectional Committee, FAD 18

<i>Organization</i>	<i>Representative(s)</i>
National Research Center on Meat, Hyderabad	DR S. B. BARBUDDHE (Chairman)
Agricultural and Processed Food Products Export Development Authority (APEDA), New Delhi	SHRI UMESH KUMAR MS SAMIDHA GUPTA (<i>Alternate</i>)
All India Meat and Livestock Exporters Association, Mumbai	DR D. B. SABHARWALL
Animal Welfare Board of India, Balabhgarh, Haryana	SHRI M. G. JAYASIMHA
AOV Exports Private Limited, Noida Uttar Pradesh	SHRI AJAY TANDON
Confederation of Indian Food and Trade Industry an Industry, New Delhi	MS PRIYANKA GUPTA
CSIR-Central Food Technological Research Institute, Mysore	DR NUSRATH NAZIR
CSIR-Central Leather Research Institute, Chennai	DR T. S. UMA
CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur	DR GIRISH POPHALI
Deonar Slaughterhouse, Mumbai	DR YOGESH JAYPRAKASH SHETYE DR KALIMPASHA AHMEDKHAN PATHAN
Export Inspection Council of India, New Delhi	DR S. K. SAXENA
Food Safety and Standards Authority of India, New Delhi	DR FIRDAUS JAHAN
Hind Agro Industries Limited	SHRI SIRAJUDDIN QURESHI SHRI S. K. RANJHAN (<i>Alternate</i>)
Indian Stainless Steel Development Association (ISSDA), Gurugram	SHRI ROHIT KUMAR SHRI RAJEEV GUPTA (<i>Alternate</i>)
Indian Veterinary Research Institute, Izatnagar	DR S. K. MENDIRATTA
Kerala Veterinary and Animal Sciences University, Thrissur	DR SUNIL B. DR VASUDEVAN V. N. (<i>Alternate</i>)
Minister of Fisheries, Animal Husbandry and Dairying, New Delhi	DR M. K. AGNIHOTRI
National Research Centre for Pig, Guwahati	DR R. THOMAS
People for Ethical Treatment of Animals, Mumbai	DR MANILAL VALLIYATE MS BHUVANESHWARI GUPTA (<i>Alternate</i>)
Tamil Nadu Vet & Animal Sciences University, Chennai	DR R. NARENDRA BABU DR S. EZHILVELAN
In Personal Capacity	DR V. K. MODI
BIS Directorate General	SHRIMATI SUNEETI TOTEJA, SCIENTIST 'E' AND HEAD (FAD) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

*Member Secretary*SHRI RAJPAL
SCIENTIST 'D' (FAD), BIS

Bureau of Indian Standards

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This Indian Standard has been developed from Doc No.: FAD 18 (14406).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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